

Highlights

Overview

This issue of the *Natural Gas Monthly* contains estimates of natural gas data through July 2000 for many data series at the national level. Estimates of natural gas wellhead prices have been extended 2 months beyond other natural gas price series and are shown in Table 4. Thus, while wellhead prices are available through June 2000 in this issue, most other national-level prices are available through April 2000. The procedure for estimating wellhead prices is described in Note 8 of Appendix A. This issue also provides natural gas data at the State level generally through March 2000.

Highlights of the most recent data estimates contained in this issue are:

- The amount of working gas in underground storage at the end of July 2000 is estimated to be 2,065 billion cubic feet, 6 percent lower than the average of 2,207 billion cubic feet for July during 1995-1999.
- Dry natural gas production from January through July 2000 is comparable with the level during the same period of 1999.
- End-use consumption of natural gas from January through July 2000 is 2 percent higher than during the same period in 1999. The increase has been driven by a 7-percent rise in industrial consumption during the period, and much of it can be attributed to increases in consumption for nonutility electric generation.
- The average natural gas wellhead price continued to rise sharply during 2000. In June it reached \$3.58 per thousand cubic feet, 47 percent higher than the highest monthly price of 1999, which was \$2.44 per thousand cubic feet in November.

Supply

Cumulative dry natural gas production for January through July 2000, estimated at 10,902 billion cubic feet, is nearly the same as in 1999 (Table 1). As a daily rate, dry

production during 2000 has averaged 51.2 billion cubic feet per day, nearly 2 percent lower than in 1997 and 1998 for the same January-through-July period (Figure HI1). Daily production rates during the early months of 2000 were lower compared with those of early 1999, but from April through July, daily production each month has been 1 percent higher than during 1999. The greatest difference between the years so far occurred in February when the daily production rate was 4 percent lower than in February 1999.

The daily rate of cumulative net imports of natural gas for January through July 2000 is 2 percent higher than during 1999 for the same period. Cumulative net imports are estimated to be 1,969 billion cubic feet or an average of 9.2 billion cubic feet per day (Table 2).

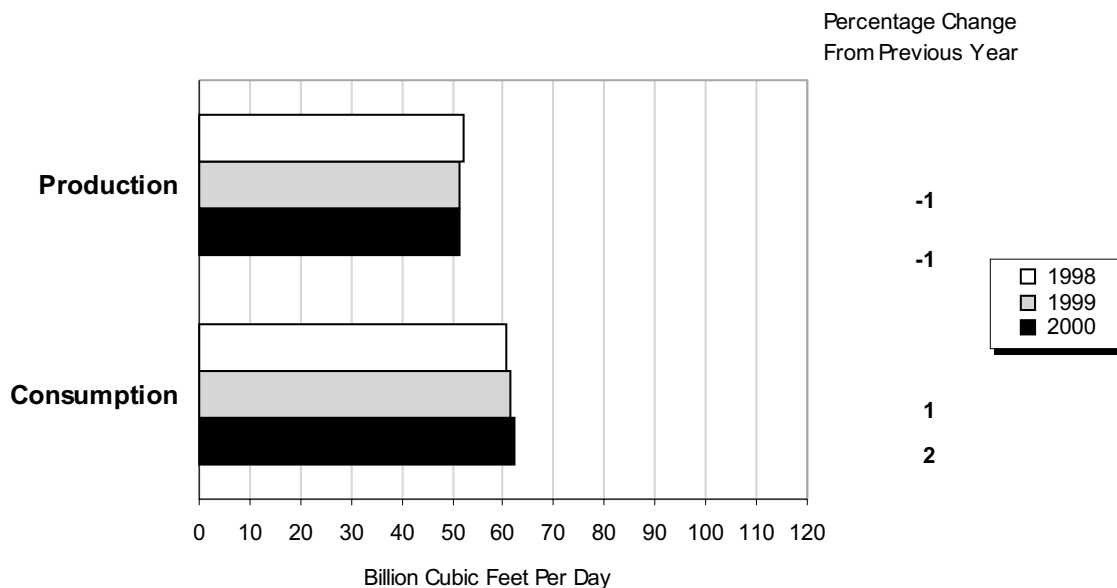
The amount of working gas in underground storage at the end of July 2000 is estimated to be 2,065 billion cubic feet (Table 10). While this is 14 percent lower than the unusually high volume seen at the end of July 1999, it is only 6 percent lower than the average of 2,207 billion cubic feet for July during 1995-1999 (Figure HI2). Net injections during July 2000 are estimated to be 328 billion cubic feet, 46 percent higher than during July 1999 and 9 percent higher than the 5-year average (1995-1999). Overall, net injections were 17 percent below the 5-year average rate for the first 4 months of the refill season.

End-Use Consumption

End-use consumption of natural gas through the first 7 months of 2000 is estimated to be 12,154 billion cubic feet or 57.1 billion cubic feet per day, about 2 percent above the daily rate for the same period of 1999 (Table 3). Consumption increased substantially in the industrial sector, by 7 percent, while it dropped by 2 percent in the residential sector and increased by almost 1 percent in the commercial sector (Figure HI3).

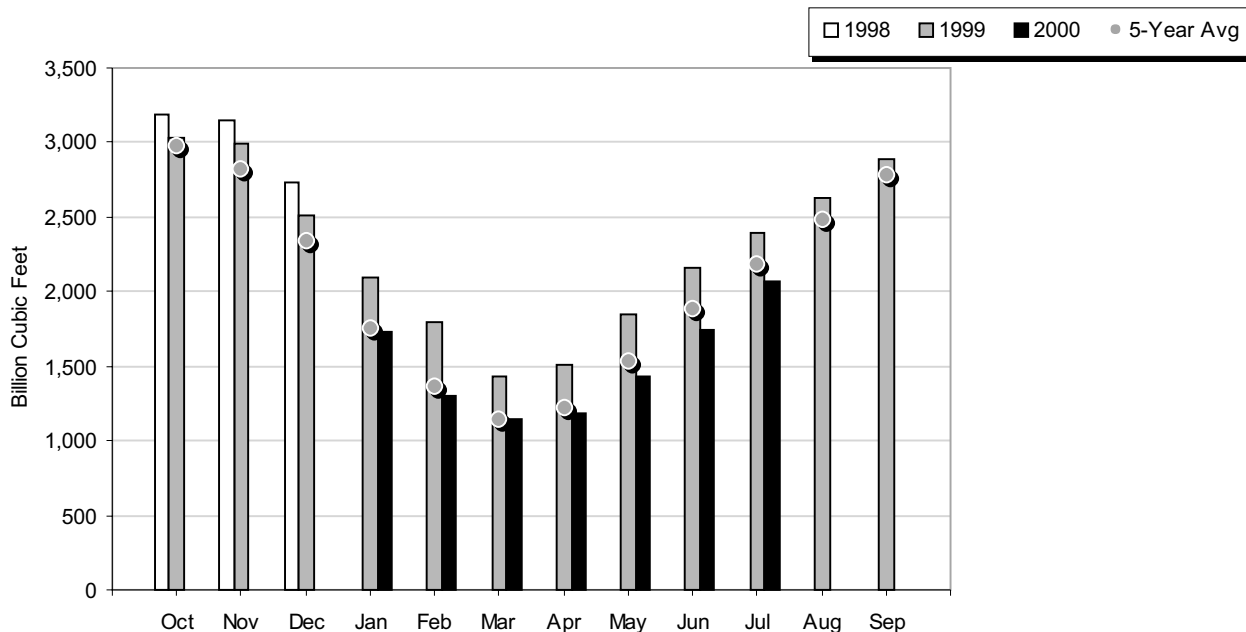
The residential and commercial sectors are highly responsive to weather-related space-heating requirements. Cumulative residential consumption for

Figure HI1. Average Daily Rate of Natural Gas Production and Consumption, January-July, 1998-2000



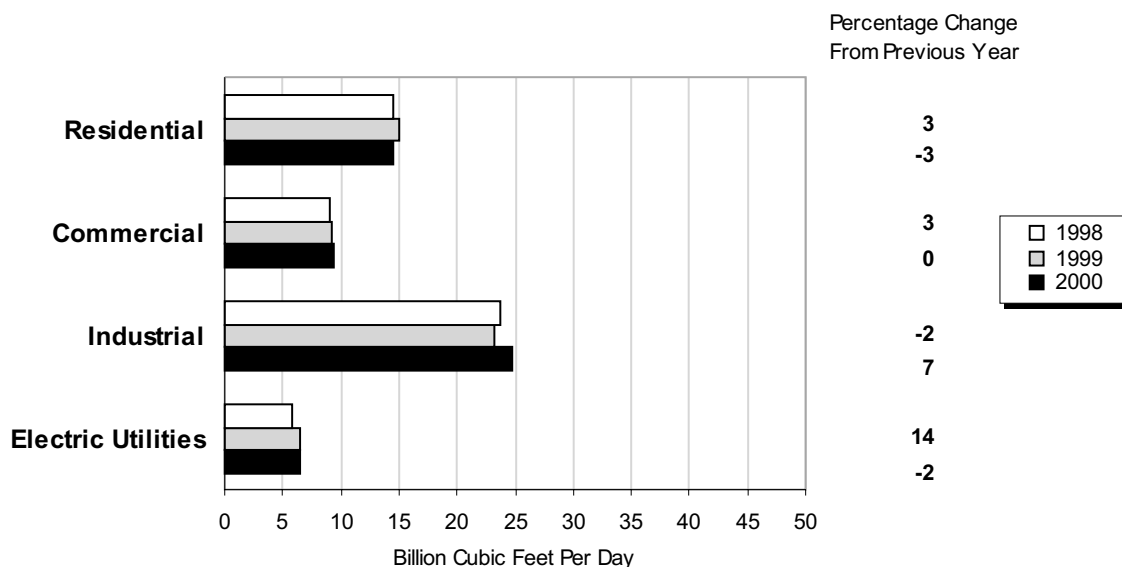
Source: Table 2.

Figure HI2. Working Gas in Underground Storage in the United States, 1998-2000



Note: The 5-year average is calculated using the latest available monthly data. For example, the December average is calculated from December storage levels for 1995 to 1999 while the January average is

Figure HI3. Average Daily Rate of Natural Gas Deliveries to Consumers, January-July, 1998-2000



Note: Electric utilities reflect deliveries for January-April.

Source: Table 3.

January through July 2000 is estimated to be 3,098 billion cubic feet or 14.5 billion cubic feet per day, 3 percent lower than the daily rate for the same period in 1999. Much of the decline can be attributed to generally warmer-than-normal temperatures during the first 3 months of 2000, which resulted in lower gas demand for residential space heating. Consumption rose slightly, by less than 1 percent, in the commercial sector. Cumulative commercial consumption from January through July is estimated to be 9.3 billion cubic feet per day, virtually the same as the daily rate during the first 7 months of 1999.

The average daily rate of industrial consumption of natural gas was 24.8 billion cubic feet for January through July 2000 compared with 23.2 billion cubic feet per day during the first 7 months of 1999, an increase of 7 percent. Beginning in February 2000, gas consumption in this sector rose in each month compared with the same month of 1999. Much of the increase in industrial consumption reflects increases in gas used by nonutility generators to generate electricity. As the restructuring of the electric utility industry proceeds, many previously regulated generating plants have been sold to entities that are not regulated utilities. These facilities are classified as nonutility generators, and the gas that they consume is reported as industrial, rather than electric utility consumption.

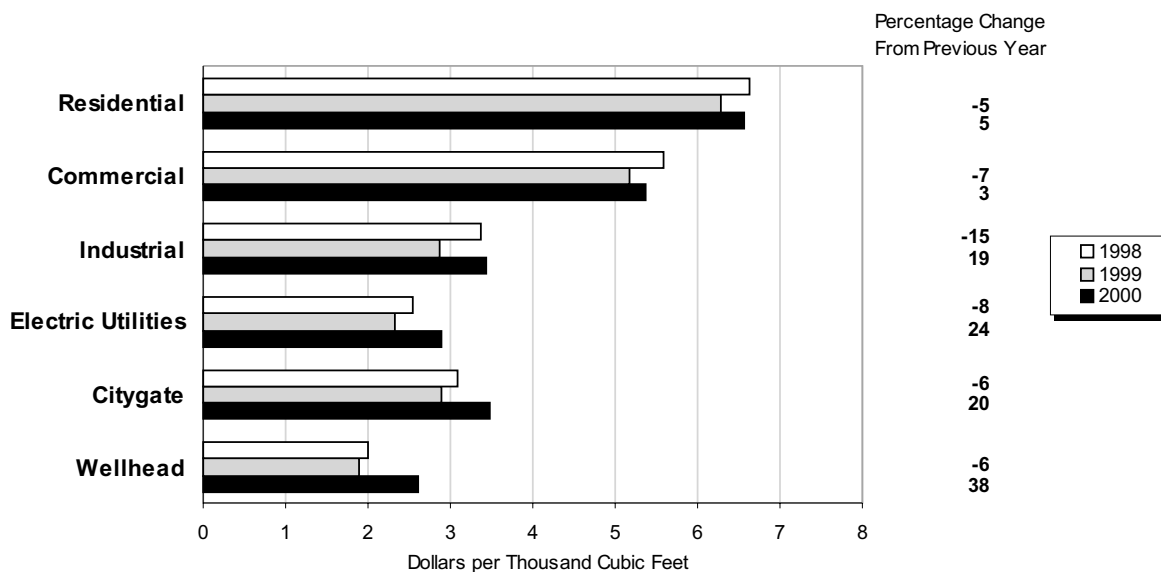
Data for the electric utility sector are available only through April 2000. Cumulative consumption in this sector was 6.4 billion cubic feet per day, 2 percent below the daily rate of 6.5 billion cubic feet during the same period of 1999. As previously noted, decreases in the consumption of natural gas by electric utilities may reflect the transfer of some generating facilities from the electric utility sector to the industrial sector.

Prices

The Energy Information Administration is providing more recent estimates of wellhead prices. These estimates, which first appeared in the June *Natural Gas Monthly*, are \$2.76 per thousand cubic feet for May 2000 and \$3.58 per thousand cubic feet for June 2000 (Table 4). Cumulatively for the first half of 2000, the estimated natural gas wellhead price is \$2.33 per thousand cubic feet, \$0.54 (30 percent) higher than in the first half of 1999 (Figure HI4).

Average prices paid by residential and commercial users of natural gas through April 2000 are also higher than during the same period in 1999. On average, residential users paid an estimated \$6.57 per thousand cubic feet for natural gas during January through April 2000, \$0.46 (8 percent) higher than in 1999, and com-

Figure HI4. Average Delivered and Wellhead Natural Gas Prices, January-April, 1998-2000



Note: Commercial and industrial average prices reflect onsystem sales only. The reporting of wellhead prices is 2 months ahead of the reporting of city gate, residential, commercial, and industrial prices. The reporting of electric utility prices is 1 month behind the reporting of city gate, residential, commercial, and industrial prices.

Source: Table 4.

mercial¹ users paid an estimated \$5.36 per thousand cubic feet, \$0.18 (3 percent) higher than in 1999.

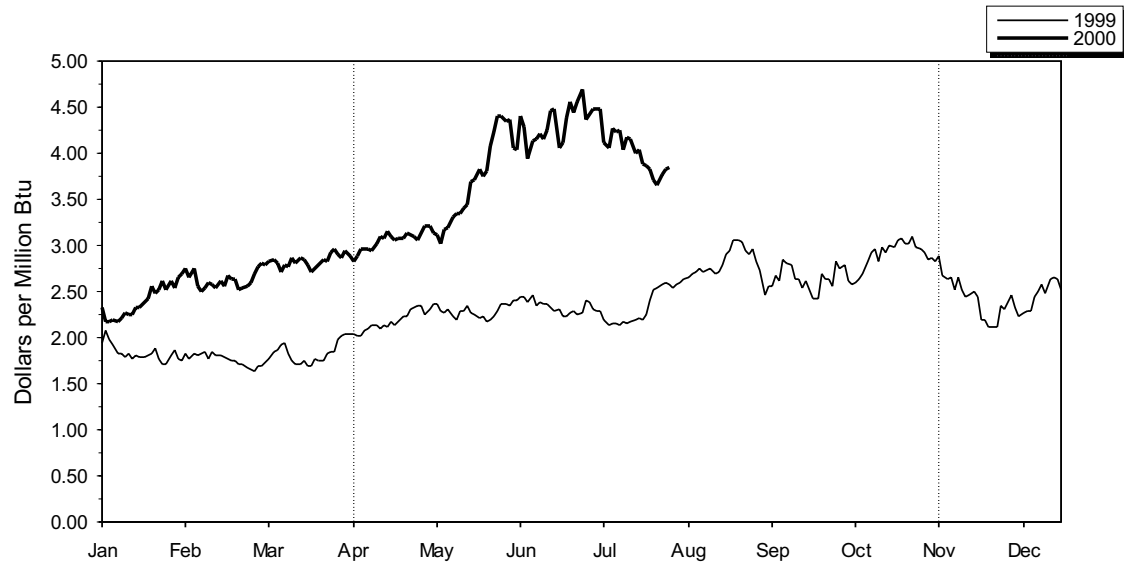
Prices in the industrial and electric utility sectors react more quickly to changes in the wellhead price because the commodity cost is a larger share of the delivered price in these two sectors compared with the residential and commercial sectors. Industrial and electric utility prices showed large increases compared with early 1999. Industrial users paid an estimated \$3.43 per thousand cubic feet for natural gas on average during January through April 2000, \$0.49 (17 percent) higher than in the same period of 1999. In the electric utility sector, where price estimates are available only through March 2000, the cumulative average price paid for natural gas during the first quarter of 2000 was \$2.89 per thousand

cubic feet, \$0.65 (29 percent) higher than during the first quarter of 2000.

Natural gas prices at the Henry Hub, both on the spot market and on the New York Mercantile Exchange (NYMEX) futures market, have risen steadily since February, reaching a peak thus far in late June of more than \$4.60 per million Btu. Prices softened in early July as the Midwest and the Northeast experienced cooler-than-normal temperatures most days during the first 3 weeks of the month. This downward trend in prices resulted in a closing price of \$3.820 per million Btu on July 27 for the NYMEX August futures contract (Figure HI5). This level was \$0.549 below the closing price of the July contract but \$1.219 above that of the August 1999 contract. Also during the last week of July, the average daily spot price at the Henry Hub was below \$3.90 per million Btu each day.

¹ End-use prices in the residential, commercial, and industrial sectors are for onsystem gas sales only. While monthly onsystem sales are nearly 100 percent of residential deliveries, in 2000 they have averaged 68 percent of commercial deliveries and only 18 percent of industrial deliveries (Table 4).

Figure HI5. Daily Futures Settlement Prices at the Henry Hub



Note: The futures price is for the near-month contract, that is, for the next contract to terminate trading. Contracts are traded on the New York Mercantile Exchange. April 1 is the beginning of the natural gas storage refill season. November 1 is the beginning of the heating season.

Source: Commodity Futures Trading Commission, Division of Economic Analysis.

